

SUPPLEMENTAL WORKSHEETS & TABLES

TABLE 1 **Employee Emission Reduction Factors** Performance Zone 1 (1.75 AVR)

(pounds per year per employee)

Emission Year	VOC	NOx	СО
2004	4.55	4.97	47.89
2005	4.10	4.41	43.28
2006	3.72	4.03	39.91
2007	3.39	3.60	36.05
2008	3.09	3.27	32.98
2009	2.82	2.97	30.24
2010	2.56	2.68	27.50

Performance Zone 2 (1.50 AVR) (pounds per year per employee)

Emission Year	voc	NOx	СО
2004	3.54	3.86	37.25
2005	3.19	3.43	33.67
2006	2.89	3.13	31.04
2007	2.64	2.80	28.04
2008	2.40	2.54	25.65
2009	2.20	2.31	23.52
2010	1.99	2.08	21.39

Performance Zone 3 (1.30 AVR)

(pounds per year per employee)

Emission Year	VOC	NOx	СО
2004	2.45	2.67	25.79
2005	2.21	2.37	23.31
2006	2.00	2.17	21.49
2007	1.83	1.94	19.41
2008	1.66	1.76	17.76
2009	1.52	1.60	16.28
2010	1.38	1.44	14.81



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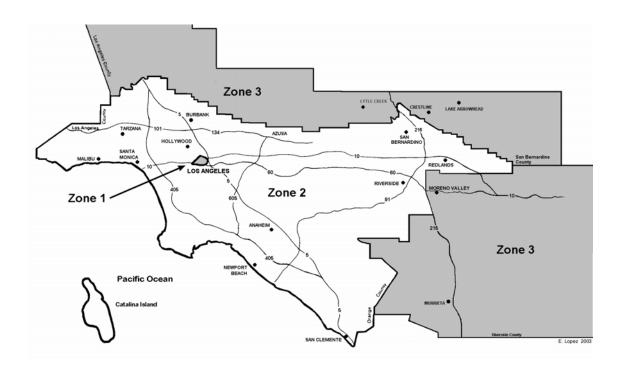
TABLE 2 Emission Factors for Vehicle Trip Emission Credit (VTEC)

(pounds per year per daily commute vehicle)

Emission Year	VOC	NOx	CO
2004	10.62	11.59	111.75
2005	9.56	10.28	101.0
2006	8.68	9.40	93.12
2007	7.91	8.40	84.11
2008	7.21	7.62	76.95
2009	6.59	6.94	70.56
2010	5.97	6.25	64.16

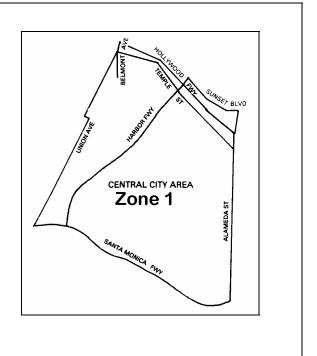


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PERFORMANCE ZONES

- A worksite's Performance Zone depends on its location.
- District's Source/Receptor Areas are shown in Attachment 3 of Rule 701 - Air Pollution Emergency Contingency Actions.
- **Zone 1** is the Central City Area of Downtown Los Angeles within the AQMD's Source/Receptor Area 1.
- **Zone 2** corresponds to the AQMD's Source/Receptor Areas 2 through 12, 16 through 23, and 32 through 35, excluding the Zone 1 Central City Area.
- **Zone 3** corresponds to the AQMD's Source/Receptor Areas 13, 15, 24 through 31, and 36 through 38.





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SUPPLEMENTAL WORKSHEETS Introduction

The purpose of the Supplemental Worksheets is to assist the preparer in determining their CCVR (Creditable Commute Vehicle Reduction) Credits or VTEC (Vehicle Trip Emission Credits).

The use of the Worksheets is optional and is not required to be submitted with the Registration form. However, the Worksheets and/or other supporting records must be kept at the worksite and be made available upon request to the AQMD or its representatives.

The employer may calculate their CCVR using any of the following:

- AQMD approved survey;
- b. Weighted average of the most immediate past three years of AVR data using the <u>current</u> year employee numbers (this option cannot be used in the ECRP/Emissions Offset); or
- c. 1.1 AVR default using the <u>current</u> year employee numbers (this option cannot be used in the ECRP/Emissions Offset); or
- d. Other AQMD approved method.

Notes:

- 1. The AQMD approved survey can be found in Appendix A.
- 2. Other AQMD approved methods <u>must</u> be approved in writing prior to submittal of the Registration form.



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SUPPLEMENTAL WORKSHEETS Weighted Average

The weighted average is determined by using the survey data of the most immediate past three years. <u>Do not</u> use the arithmetic average of AVR. The weighted average CCVR is determined as follows:

Step 1

Enter in the table below the survey data of the weekly employee trips from the last three years and add. Do the same for the weekly vehicle trips.

		Weekly employee trips (line ET of form IV-1)		Weekly vehicle trips (line TV of form IV-1)
Year 1	ET ₁		TV ₁	
Year 2	ET ₂		TV ₂	
Year 3	ET ₃		TV ₃	
Total	ET _T		TV _T	

Step 2

Using the calculated totals from Step 1, divide the total of column ET by the total of column TV.

ET _⊤	
TV _T	
ET _T ÷ TV _T = AVR _{Weighted}	

The result is AVR_{Weighted}. Continue on to Step 3.



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Step 3

Using the $AVR_{Weighted}$ calculated above divide that number into the current daily employee ($E_{Current}$). This will calculate the current daily vehicle trips ($TV_{Current}$).

E _{Current}	
AVR _{Weighted}	
E _{Current} ÷ AVR _{Weighted} =	
TV _{Current}	

The current daily employee number (Ecurrent) may be established through payroll records in determining the number of employee reporting to work in the peak window.

Step 4

Calculate the CCVR using the information from Step 3 by subtracting the current daily vehicle trips (TVcurrent) from the current daily employee (Ecurrent).

E _{Current}	
TV _{Current}	
E _{Current} - TV _{Current} =	
CCVR	

This is the CCVR based on the weighted average of three years data.

Step 5

Enter this number on line 2 (Section III) of the Registration form.



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SUPPLEMENTAL WORKSHEETS Default AVR

Step 1

Determine the current daily employee number (Ecurrent). This is the number of employees reporting to work in the peak window. Enter this number in table below.

Step 2

Divide the current daily employee number (Ecurrent) by 1.1 and calculate the current daily vehicle trips (TVcurrent).

E _{Current}	
E _{Current} ÷ 1.1 = TV _{Current}	

The current daily employee number (E_{Current}) may be established through payroll records in determining the number of employee reporting to work in the peak window

Step 3

Calculate the CCVR using the information from Step 2 by subtracting the current daily vehicle trips (TVcurrent) from the current daily employee (Ecurrent).

E _{Current}	
TV _{Current}	
E _{Current} - TV _{Current} =	
CCVR	

This is the CCVR based on the default average vehicle ridership.

Step 4

Enter this number on line 2 (Section III) of the Registration form.